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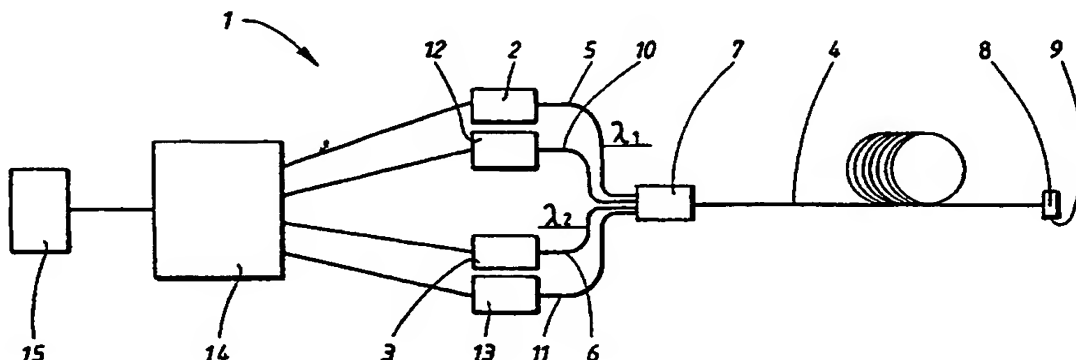
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ning of each regular issue of the PCT Gazette.*

(54) Title: A METHOD AND A DEVICE FOR BENDING COMPENSATION IN INTENSITY-BASED FIBRE-OPTICAL MEASURING SYSTEMS



(57) Abstract: The invention relates to a method for bending compensation in intensity-based optical measuring systems, comprising a sensor element (8) connected to a measuring and control unit (16) via an optical connection (4), and being adapted for providing a signal corresponding to a measurement of a physical parameter in connection with the sensor element (8), said method comprising the generation of a measuring signal ( $\lambda_1$ ) that is brought to come in towards the sensor element (8), the generation of a reference signal ( $\lambda_2$ ) that is transmitted through the optical connection (4) without being influenced in the sensor element (8), said measuring signal and said reference signal having different wavelengths, the detection of said measuring signal ( $\lambda_1$ ) and the detection of said reference signal ( $\lambda_2$ ). The invention is characterised by comprising bending compensation through correction data based upon pre-stored data concerning the relationship between the measured reference signal ( $\lambda_2$ ) and the measured measuring signal ( $\lambda_1$ ) as a function of the bending influence on said optical connection (4). The invention also relates to a device for carrying out said method. Through the invention, measurements with an optical pressure measuring system are allowed, which exhibit effective compensation for any bending of the optical connection.

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